SOUTH PLATTE RIVER TASK FORCE Options for Consideration

NOTE: THESE OPTIONS ARE MERELY SUGGESTIONS THAT HAVE BEEN PROVIDED TO THE SOUTH PLATTE TASK FORCE. THIS LIST WILL CHANGE. NONE OF THE OPTIONS LISTED HAVE BEEN ENDORSED OR ADOPTED BY THE SOUTH PLATTE TASK FORCE.

- 1. Suggestions for making water available for well augmentation or decreasing amount of augmentation water required to augment wells
- a. Pursue voluntary agreements with downstream reservoirs (e.g., "Gentlemen's Agreement").
- b. Allow aggregated, deferred replacement of well depletions during the non-irrigation season this depends on the ability of the State Engineer to make a reliable determination that reservoirs are likely to fill in the upcoming season.

c. Storage:

- i. Construction of more recharge pits/ponds
- ii. Better use of alluvial aquifer storage (use of alternate points of diversion, recharge wells and augmentation wells)
- iii. Financial assistance for storage projects and augmentation/recharge projects
- iv. Financial assistance for upgrading and reconstructing storage diversion structures and feeder canals to allow reservoirs to fill sooner and allow senior call to come off.
- d. Amnesty on replacement obligations for depletions resulting from pre-1974 pumping (requires statutory change)
- e. Make a portion of savings from removal of phreatophytes available to the remover (requires statutory change)
 - f. Make CREP/EQIP type programs available for farms on which wells curtailed
- g. Do not require augmentation for wells that are far from the South Platte River (e.g., upper Box Elder Creek, Badger Creek and Beaver Creek) (requires statutory change or designation of new ground water basins)
- h. Determine sustainable yield of basin (e.g., by SPDSS) [and allow wells to pump this yield without augmentation?]

2. Suggestions for increasing overall supply of water in South Platte River Basin

- a. Tree thinning on national forest land (decrease sublimation)
- b. Removal of non-beneficial phreatophytes and vegetation and trash choking flow in rivers and creeks
- c. Construction of new water storage or expansion of existing reservoirs (including dredging) to capture existing flow that may otherwise go out of the state unused.
- d. Support existing storage projects (e.g., Windy Gap Firming Project) and proposed projects (e.g., pump back projects from Colorado River basin)
 - e. Sharing of infrastructure
- f. Conjunctive use of surface and ground water reexamine assumption that all ground water pumping reduces amounts available for senior surface water rights

3. Suggestions for improving the system of water rights adjudication and administration

a. Water Court reform (e.g., streamline the Water Court process, recognize specific engineering methods or calculations via rulemaking, increase authority of water referee, require demonstration of actual, not theoretical, injury)

b. State Engineer authority

- i. Delegate more discretionary authority to the State Engineer to administer river (allows more timely actions) and augmentation plans (e.g., allow wells to call for water when depletions are in priority) some suggest there should be reform of State Engineer administration (e.g., don't require paper filling reservoirs).
 - ii. Allow 30-day correction period for well augmentation
- iii. Allow projections that determine allowable well pumping to be based on average pumping instead of 3 worst years
 - iv. More flexibility for using excess credits (could also be in 3.a)
 - v. Would any such authority require rule making by the State
- c. Designate which engineering standards should be adopted by the water courts (e.g., ground water modeling techniques like Glover and MODFLOW) to minimize time spent arguing about which ones are better
 - d. Clarify the standard of review for 308(4) appeals

4. Ground Rules

Engineer?

- a. Maintain Doctrine of Prior Appropriation System South Platte River basin is over-appropriated, and existing body of laws, policies and rules are not perfect but adequate to protect vested water rights.
- b. Return flows must be maintained but note that return flows are being affected by lined gravel pits, lined canals, more efficient irrigation systems, changes in cropping patterns, and several other factors, and these changes do not currently require maintenance of historical return flows.